

Supplemental Data

The Molecular Mechanism for Receptor-Stimulated

Iron Release from the Plasma Iron

Transport Protein Transferrin

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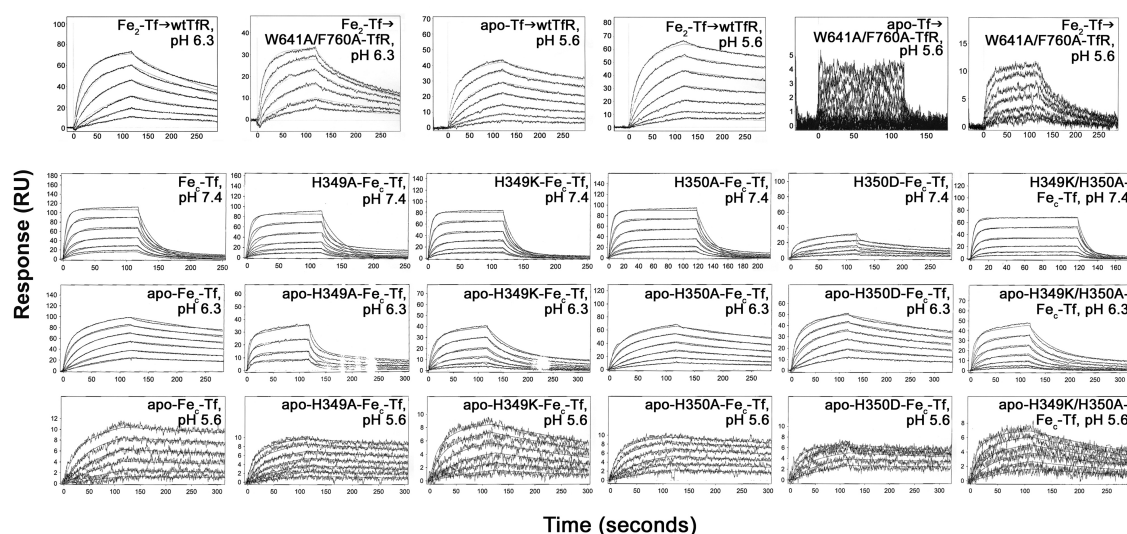


Figure S1. SPR Analysis of Iron-Loaded and apo Forms of $\text{Fe}_2\text{-Tf}$ and $\text{Fe}_\text{C}\text{-Tf}$ Binding to wtTfR and W641A/F760A-TfR

Experimentally-observed responses are shown as black lines with the best-fit binding curves (gray lines) derived from a bivalent ligand or 1:1 binding model superimposed (see Methods). Injection series are related by two-fold dilutions. The highest concentrations in the injection series for the six sensorgrams in row 1 are 125 nM, 250 nM, 500 nM, 500 nM, 10 μM and 312 nM, respectively. The highest concentrations in the injection series for the sensorgrams in rows 2 and 3 are 250 nM, except for the H350D- $\text{Fe}_\text{C}\text{-Tf}$, apo-H349A- $\text{Fe}_\text{C}\text{-Tf}$ and apo-H349K/H350A- $\text{Fe}_\text{C}\text{-Tf}$ sensorgrams, in which the highest concentrations were 125 nM, 500 nM and 500 nM, respectively. The highest concentrations in the injection series for the sensorgrams in row 4 are 100 nM, except for the apo- $\text{Fe}_\text{C}\text{-Tf}$ and apo-H350D- $\text{Fe}_\text{C}\text{-Tf}$ sensorgrams, in which the highest concentrations were 32 nM and 12.5 nM, respectively.